

REMARKS

Claims 1-4 are pending in the application. Claims 1 and 3 have been amended herein. Favorable reconsideration of the application, as amended, is respectfully requested.

I. REJECTIONS OF CLAIMS 1-4 UNDER 35 U.S.C. § 102

Claims 1-4 stand rejected under 35 U.S.C. § 102(b) based on U.S. Patent No. 3,968,336 ("Johnson"). Applicant believes that all pending claims are allowable for at least the following reasons. Withdrawal of the rejections is respectfully requested.

One of the features recited in independent claim 1 is directed to a spiral contactor. Claims 1 and 3 have been amended herein to further clarify this aspect of the invention. Specifically, claim 1 now requires that "wherein the spiral contactor is supported in a cantilever manner." Claim 3 has been amended herein to recite that "the spiral contactor includes a plurality of turns." Support for the amendments is found at, for example, page 5, line 27 - page 6, line 11 of the present specification. No new matter has been introduced by the amendments.

Johnson relates to a keyboard switch assembly. As illustrated in Fig. 3A, Johnson's sheet 22 has multiple slots 40. Claim 1 requires that the spiral contactor is supported in a cantilever manner. The term "cantilever" means "a projecting beam or structure supported only at one end" (The Merriam-Webster Dictionary). The Johnson sheet 22 has multiple slots 40, rather than a spiral contactor used in embodiments of the present invention. These multiple slots 40 are not "supported only at one end." Rather, each of the slots 40 is supported at myriad points along the slots 40 on the sheet 22. Therefore, it is respectfully submitted that Johnson's slots 40 do not correspond to a spiral contactor "supported in a cantilever manner" as claimed. Claim 1 is believed to be allowable over the Johnson patent at least in this regard.

Claim 3 is believed to be patentable over the cited art for at least the reasons set forth above in connection with claim 1. Further, claim 3 requires that "the spiral contactor includes a plurality of turns." By contrast, as illustrated in Fig. 3A, none of Johnson's slots 40 circles 360 degrees with respect to the central portion 42. In fact, each of the slots 40 merely have a central angle of only about 300 degrees much less a plurality of turns. Therefore, Johnson's slots 40 cannot be said to anticipate the claimed "plurality of turns" included in the spiral contactor. Claim 3 is believed to be allowable over Johnson in this regard as well.

As described throughout the present specification, various embodiments of the invention enable a self-cleaning function because the movable electrode is formed as a spiral contactor that is supported in a cantilever manner. By contrast, Johnson's slot-type sheet cannot perform such a function.

In summary, Applicants find nothing in the prior art that suggests the above-discussed claimed features of claims 1 and 3. Therefore, it is respectfully submitted that the invention defined in independent claim 1, and its dependent claims is patentable over the cited art. Withdrawal of the rejections is respectfully requested.

II. CONCLUSION

Applicants believe that all pending claims are in condition for allowance, and respectfully request a Notice of Allowance at an early date. If the Examiner has any continuing concerns about patentability of the claimed invention, he is encouraged to telephone the undersigned at 510-843-6200, ext 245.

Respectfully submitted,
BEYER WEAVER & THOMAS, LLP


Haruo Yawata
Limited Recognition under 37 CFR § 10.9(b)

P.O. Box 778
Berkeley, CA 94704-0778
Tel: 510-843-6200, ext. 245

Application No.: 10/762,830
Atty Docket: ALPSP143/F US02145

5

BEFORE THE OFFICE OF ENROLLMENT AND DISCIPLINE
UNITED STATES PATENT AND TRADEMARK OFFICE

LIMITED RECOGNITION UNDER 37 CFR § 10.9(b)

Mr. Haruo Yawata is hereby given limited recognition under 37 CFR § 10.9(b) as an employee of Beyer Weaver & Thomas, LLP to prepare and prosecute patent applications wherein the patent applicant is the client of Beyer Weaver & Thomas, LLP, and the attorney or agent of record in the applications is a registered practitioner who is a member of Beyer Weaver & Thomas, LLP. This limited recognition shall expire on the date appearing below, or when whichever of the following events first occurs prior to the date appearing below: (i) Mr. Haruo Yawata ceases to lawfully reside in the United States, (ii) Mr. Haruo Yawata's employment with Beyer Weaver & Thomas, LLP ceases or is terminated, or (iii) Mr. Haruo Yawata ceases to remain or reside in the United States on an H-1 visa.

This document constitutes proof of such recognition. The original of this document is on file in the Office of Enrollment and Discipline of the U.S. Patent and Trademark Office.

Expires: January 2, 2007



Harry L. Moatz
Director of Enrollment and Discipline

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.